# **OW Management Report**

# **Gold King Mine Release and Typhoon Soudelor**

# August 16, 2015

## **Gold King Mine Release**

## Background:

On August 5, while investigating the Gold King Mine in Colorado, an EPA cleanup team triggered a release of mine wastewater into Cement Creek. The EPA is working closely with responders and local, state and tribal officials to monitor water contaminated by the release. The release's path flows through three of the EPA's regions - Region 8 (Colorado, Utah, Southern Ute Tribe, and Ute Mountain Ute Tribe); Region 6 (New Mexico), and Region 9 (Navajo Nation). EPA has activated its Emergency Operations System to ensure coordination among its regions, laboratories and national program offices in Washington, D.C. The EPA has also set up an incident command center in Durango, CO. The EPA is coordinating with officials in Colorado, New Mexico, Utah, Southern Ute Tribe and Navajo Nation and the Ute Mountain Ute Tribe.

# **Response Coordination:**

The EPA HQ EOC is now fully activated. Shifts will be 9:30 AM – 7 PM, Seven days a week. David Goldbloom-Helzner will staff the desk August 16, 17 and 20, and Brian Pickard will staff the desk August 18, 19 and 21.

On August 14, 2015, the New Mexico Environment Department (NMED) lifted the ban on the use of private domestic water wells. NMED also issued advisories to flush irrigation ditches as a safety precaution prior to resuming irrigation for agriculture and livestock.

On August 15, 2015, New Mexico lifted the ban on using the Animas and San Juan Rivers to supply the San Juan County's drinking water systems. Until the New Mexico Game and Fish can determine the level of contamination in fish, it strongly recommends that anglers do not eat the fish they catch.

Animas River sediment samples were posted to the incident website on August 14. No results exceeded recreational screening levels.

# EPA Statement on New Mexico Reopening Private Domestic Water Well Use (Effective August 14, 2015):

The decision to resume private domestic water well use is based on water quality sampling results collected by both New Mexico Environment Department and the EPA. Reopening private domestic water well use is a state and local decision and we believe they have taken appropriate steps in arriving at this this decision. EPA sampling results from the river collected last week similarly show that water quality conditions are returning toward pre-event conditions. We know the state has gone through a deliberative process in making this decision. EPA will continue to sample, analyze, and make data available to support local decision makers moving forward to allow them to make the best informed decisions.

In an August 14, 2015 press release from the City of Durango, Colorado, the City resumed pumping raw water for drinking water treatment and distribution after independent sampling results supported such a decision. The City has also lifted the outdoor irrigation restrictions.

# **EPA Activities:**

On August 15, 2015, EPA released additional water quality data from Aug. 7 to Aug. 11, 2015, on the San Juan River between Farmington and Shiprock, New Mexico.

Table 1 – Operation Sampling Activities (August 13, 2015)

Matrix	Region	August 13, 2015
Private Drinking Water Wells	Region 6	42
	Region 8	19
	Region 9	0
Surface Water Samples	Region 6	9
· ·	Region 8	4
	Region 9	7
Sediment Samples	Region 6	39
	Region 8	12
	Region 9	7

**Table 2 – Public Support Summary** 

Activity	Region	August 13, 2015		Cumulative	
		Items	Quantity (gallons)	Items	Quantity (gallons)
Potable Water	Region 6	NR	NR	NR	NR
Deliveries	Region 8	0	0	9	58,200
	Region 9	0*	0*	0*	0*
Livestock /	Region 6	9	298,863	21	532,623
Agricultural	Region 8	1	15,430	31	91,020
Water Deliveries	Region 9	2	28,000	2	28,000
Agricultural Food	Region 6	NR	NR	NR	NR
Deliveries	Region 8	NR	NR	NR	NR
	Region 9	0	0	0	0

Notes: NR- No deliveries reported.

Drinking water systems affected by the response as of August 13, 2015, and their status are summarized below:

<sup>\*</sup>Water deliveries in Region 9 are being handled by the Navajo Tribal Utility Authority.

Table 3 - Public Support Summary

Region	Number of Affected Water Systems	Population	Status
Region 6	8	80,392	All systems operation
Region 8	0	0	All systems operation
Region 9	0	0	All systems operation

#### Region 8:

The CDPHE, and public water systems regulated by CDPHE in the impacted area, are taking raw and finished water samples to monitor water quality. CDPHE is coordinating with City of Durango drinking water treatment staff regarding the Animas River intake. It was not in use at the time of the event and has been off-line pending water quality assessment with CDPHE and completion of irrigation canal flushing.

CDPHE has 7 staff in area and continued collecting the Animas River surface water and sediment sampling. Also continued outreach to public water supply system operators. Public system operators are continuing normal testing of their systems.

In response to requests from nine residents, one the EPA sampling teams will be working with the Southern Ute trip sampling private drinking water wells. Durango area operations are conducting more ditch survey work. Irrigation ditches in the southern area of the Animas in Colorado that had minimal staining will be flushing and potentially opening today.

The EPA is working with Bureau of Reclamation (BOR) on taking a sediment sample on 8/14/2015 at the intake to the Animas La Plata Nighthorse Reservoir.

The EPA is collecting and assessing water quality from Cement Creek and the Animas daily. Water sampling is occurring, and pH levels and dissolved concentrations of metals are being monitored. The EPA has several sampling teams; one surface water and four well water in the field on 8/15/2015. Potable Water Delivery as of 8-14: Total Deliveries: 12 totaling 87,400 gallons Stakeholders:

- Single Family Home cisterns.
- Multiple family homes on neighborhood cistern.

1120 cases of bottled water have been purchased to hand out to community.

#### Region 6:

NMED informed EPA that the Town of Morningstar's reserve had dropped drastically and the Town only had an estimated 48 hours of available supply, as of August 14, 2015. EPA is acting quickly to mobilize a temporary pump to facilitate an emergency connection between Farmington and Morningstar. Morningstar and Farmington are completing the connection between their water systems, current plans are to complete this task the afternoon of 8/16/15. NMED supports EPA's decision to put this pumping system into place. The water system operators will complete the connections and will operate the system once functional. Although the public water intakes have been opened, it will take at least 48

hours for the system to completely come back on line.

On August 15, 2015, EPA began transporting and offloading raw water into Morningstar's pretreatment settling ponds. Seven trucks were dedicated to delivering raw water to Morningstar. It is not expected to significantly reduce the need for additional water supply. Morningstar was very appreciative of EPA's quick response and assistance.

#### Region 9:

- R9 is conducting surface water sampling and sediment sampling along the San Juan River in the Navajo Nation at 11 monitoring sites
- Surface water sampling was conducted at Lake Powell on August 15, 2015.
- The Navajo Tribal Utility Authority has initiated sampling of the three wells at Montezuma Creek and at the intake of the Mexican Hat surface water plant.
- EPA (R9) is paying for water hauling services to deliver water to areas served by wells on the NTUA Montezuma Creek public water system which was shut down as a precaution
- EPA (R9) continues to provide over 50,000 gallons of water per day to designated distribution areas identified by NTUA.
- Water trucks to address Navajo agricultural and livestock needs have been secured and will be continuing to deliver water to designated locations.

# **Infrastructure Impacts:**

### Region 6:

Based on conversation with the State of New Mexico and drinking water systems on August 12, 2015, the following is the list of affected water systems and their status:

System Name	Population	# Days Water Available
Aztec Domestic Water System	6800	10 days
Farmington Water System	47000	60 days
Lower Valley WUA	8428	6 days
Morningstar Water Supply	6423	3-5 days*
System		
Northstar WDWCA	4123	30 days
Southside Mutual Domestic	1593	3-5 days get water from Aztec
Upper La Plata WUA	2265	Get water from Aztec and
		Farmington
Flora Vista	4300	1 day/get water from Aztec
Total Population	80,392	

<sup>\*</sup> see note in Region 6 EPA Activities above

**Sampling Results:** EPA continues to post sampling results on the public website http://www2epa.gov/goldkingmine

